casestudy

Avery Dennison® Greenprint™:

High Performance Primax® and FasClear® vs 3 Mil MDO

Creating Impact on the Shelf and Beyond

Avery Dennison GreenPrint in Action

By switching from a label made of 3.0 Mil MDO with S692N adhesive to a High Performance Primax and FasClear with ClearCut adhesive, customers can reduce environmental impacts from 4% to 19% across the categories of fossil material, water use, energy use, greenhouse gas emissions and solid waste generated.

Label Components

3 Mil MDO Label	High Performance Primax and FasClear Label
Facestock: 3 Mil MDO	Facestock: 2.5 Mil High Performance Primax and FasClear
Adhesive: S692N	Adhesive: S7000

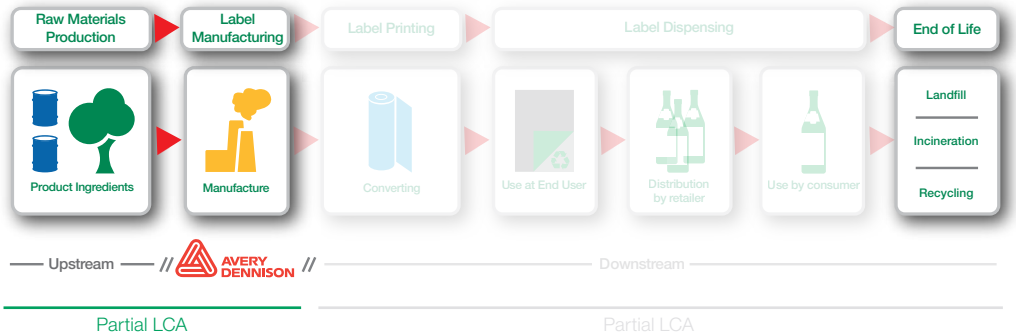
Both labels studied utilized different but comparable label components. These included:

> **Adhesive:** Both filmic facestocks utilize an acrylic emulsion adhesive: S692N and S7000

> **Facestock:** Both 3 Mil MDO and High Performance Primax and FasClear utilize a machine direction oriented facestock.

Packaging has been taken into account for each transport step. Packaging components that have been reused a significant number of times are not taken into account in the calculation. Mass related impacts, notably transportation, also varied with the weight variations and have been accounted for.

Life Cycle Scope



	Fossil Material	Trees	Water Depletion	Energy Use	GHG	Solid Waste
	FOSSIL MATERIAL — barrels of oil-e —	TREES — trees-e —	WATER — gallons —	ENERGY — kWh —	GHG — tonnes CO2-e —	SOLID WASTE — lbs —
High Performance Primax and FasClear	**268**	**0**	**185,340**	**937,423**	**183**	**42**
3 Mil MDO	**310**	**0**	**193,717**	**1,107,617**	**215**	**52**
Difference	**42**	**0**	**8,377**	**170,194**	**32**	**10**
Impact	**14% less**	**--**	**4% less**	**15% less**	**15% less**	**19% less**

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Environmental Impact

If one BSI of 3 Mil MDO was replaced with High Performance Primax and FasClear, the following environmental benefits would occur:

- Reduce fossil material usage by 14%, the equivalent of saving 42 barrels of oil.
- Reduce biobased materials used by 0%, the equivalent of saving 0 trees.
- Reduce water usage by 4%, the equivalent of saving the annual drinking water for 33.9 people.
- Reduce water usage by 4%, the equivalent of saving the annual electricity usage of 14.1 households
- Reduce greenhouse gases by 15%, the equivalent of taking 6.7 cars off the road for one year.
- Reduce waste generated by 19%, the equivalent of eliminating the annual waste generated by 4.8 households.

Reference for conversions:
epa.gov/cleanenergy/energy-resources/refs.html
epa.gov/waste/nonhaz/municipal/
iom.edu/~/media/Files/Activity%20Files/Nutrition/DRI_Electrolytes_Water.pdf

About the Avery Dennison Greenprint Method

The Avery Dennison Greenprint™ methodology is a life cycle-based environmental performance assessment tool. It provides cradle to output gate plus end of life comparative assessment of materials used for the scenario described in this assessment. The results provide directional indication of improvement over an existing product and should not be interpreted as a product footprint data. Results may be displayed with several significant figures, but do not imply a corresponding level of precision. Supporting data is based on a combination of primary data when available and industry average information.

All comparisons are believed to be reliable and accurate. However, the furnishing of such information and comparisons is for reference purposes only and does not constitute a warranty of any kind. Actual product performance should always be tested for fitness-for-use

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